

XTP T HDMI and XTP R HDMI • Setup Guide



This guide provides instructions for an experienced installer to install and connect the Extron XTP T HDMI transmitter and XTP R HDMI receiver.

Transmitter Connections	Receiver Connections] () () () () () () () ()
① DC power connector	DC power connector	
② HDMI input connector	XTP input connector	AUDIO AUTO
③ HDMI Loop-thru connector	10 LAN connector	+- HOMI LOOP-THRU OFF +-++-
4 Analog audio input connector	1 RS-232/IR Over XTP connector	XTP T HDMI Rear Panel
⑤ RS-232/IR Over XTP	12 HDMI output connector	8 9 10 11 12 13 14 15
connector	Analog audio output connector	
6 XTP output connector	S/PDIF audio output connector	OUT VID
7 LAN connector	® Relay connectors	

Installation

Step 1 — Mounting

Turn off or disconnect all equipment power sources and mount the transmitter and receiver as required.

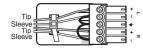
Step 2 — Connecting inputs

a. Connect a digital video source to the female HDMI connector of the XTP T HDMI (see ② above). It can accept HDMI, DVI (with an appropriate adapter), or DisplayPort video signals.

NOTES:

- Use an Extron LockIt® Locking Bracket to secure HDMI cables to the connectors.
- Video input from a DisplayPort source must be a dual mode DisplayPort source.
- **b.** Connect a digital video display to the HDMI loop-thru connector on the transmitter to locally display the input source. Displays that are not HDCP compliant display a green screen when HDCP encrypted content is sent to them (see ③ above).
- Connect balanced or unbalanced stereo audio to the 3.5 mm, 5-pole captive screw connector (see ⁽⁴⁾ above).

Sleeves Tip Ring





Step 3 — Connecting Throughput Devices

a. Connect a twisted pair cable between the XTP connectors on the transmitter and receiver (see [®] and [®] above).

Balanced Stereo Input

XTP R HDMI Rear Panel

Unbalanced Stereo Input

Do not tin the wires!

ATTENTION: network.

Do not connect these connectors to a computer data or telecommunications

The XTP T HDMI and XTP R HDMI are compatible with CAT 5e, 6, 6a, and 7 shielded twisted pair (F/UTP, SF/UTP, and S/FTP) and unshielded twisted pair (U/UTP) cable. Extron recommends using the following practices to achieve full transmission distances up to 330 feet (100 m) and reduce transmission errors.

- Use Extron XTP DTP 24 SF/UTP cable for the best performance. If not using XTP DTP 24 cable, at a minimum, Extron recommends 23 AWG, solid conductor, STP cable with a minimum bandwidth of 400 MHz.
- Terminate cables with shielded connectors to the TIA/EIA T 568 B standard.
- Limit the use of more than two pass-through points, which may include patch points, punch down connectors, couplers, and power injectors. If these pass-through points are required, use CAT 6 or 6a shielded couplers and punch down connectors.





NOTE: When using CAT 5e or CAT 6 cable in bundles or conduits, consider the following:

- Do not exceed 40% fill capacity in conduits.
- . Do not comb the cable for the first 20 m, where cables are straightened, aligned, and secured in tight bundles.
- Loosely place cables and limit the use of tie wraps or hook and loop fasteners.
- Separate twisted pair cables from AC power cables.

Signal LED — Lights on the transmitter when it is transmitting a video signal or a test pattern. Lights on the receiver when it receives an active XTP input signal from the transmitter.

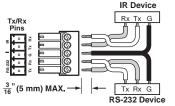
Link LED — Lights yellow when a valid link between an XTP input and output is established.

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b. To pass bidirectional serial, infrared, or other control signals, connect a control device or a device to be controlled to the RS-232 and IR connector (see ③ and ⑪ on page 1).

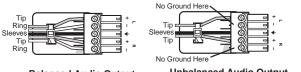
NOTE: RS-232 and IR data can be transmitted simultaneously.

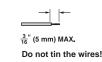
Connect a host device or control LAN or WAN to the LAN RJ-45 connector for pass-through 10/100 Ethernet communication (see ② and ⑩ on page 1). These are Ethernet pass-through ports with LEDs to indicate link and activity status.



Step 4 — **Connecting Outputs**

- Connect a digital video display to the HDMI connector of the XTP R HDMI (see [®] on page 1).
- b. Connect a balanced or unbalanced, stereo or mono audio device to the 3.5 mm, 5-pole captive screw connector on the receiver for 2-channel stereo analog audio (see [®] on page 1).





Balanced Audio Output

Unbalanced Audio Output

c. Connect an audio device to the female orange RCA connector for digital S/PDIF audio output (see 🖲 on page 1).

Step 5 — Connecting Control Devices, Relays, and Power

- a. Connect a host device, such as a computer, to the female mini-USB B port on the front panel of the transmitter or receiver to configure the device or update firmware (see the image to the right).
- b. Connect equipment that can be controlled via momentary or latching contact, like projector screens or lifts, to these normally open relays. Do not exceed 24 V at 1 A for each port (see (s) on page 1).
- c. Power XTP transmitters and receivers in one of the following methods:
 - Connect the provided external power supply to the 2-pole captive screw connector on both the transmitter and receiver (see ① on page 1).
 - Connect the provided external power supply to the 2-pole captive screw connector on a transmitter or receiver. Connect an XTP Power Injector between the transmitter and receiver XTP connection to power the unpowered device remotely.
 - Connect the transmitter or receiver to an XTP matrix switcher. Enable the remote power feature on the XTP matrix switcher.

Operation

After all transmitters, receivers, and connected devices are connected and powered on, the system is fully operational. If any issues arise, verify that the cables are routed and connected properly.

NOTE: Use the Extron XTP System Configuration Software or SIS commands to configure the transmitter or receiver (see the XTP T HDMI and XTP R HDMI User Guide).

HDMI Audio Switch

On either device, move and hold the HDMI audio switch up to enable embedded audio on a display connected to the associated HDMI connector or down to disable it (for about 1 second). The switch returns to the middle position after it has been released. The associated LED lights when audio is enabled and remains unlit when audio is disabled.

Indicators

Power LED — Lights on the front and rear panel when power is applied to the device.

Transmitter indicators

 $\mbox{\bf Signal LED}-\mbox{\bf Lights}$ when an active TMDS clock signal is detected from the source.

 ${f HDCP\ LED}-{f Lights}$ when the input signal is encrypted.

HDMI Audio LED — Lights when the HDMI input audio is selected in auto-switch mode or through SIS commands.

Analog Audio LED — Lights when the analog audio input is selected in auto-switch mode or through SIS commands.

Audio Signal Clip LED — Lights red when the analog audio input signal remains above -3 dBFS. It remains lit for 200 ms after the signal falls below -3 dBFS.

Extron

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Receiver indicators

Signal LED — Lights when an active XTP video signal is received.

 ${f HDCP\ LED}-{f Lights}$ when the input XTP signal is encrypted.

 ${f HBR\ LED}-{f Lights}$ when the embedded audio signal is high bit rate audio.

Bitstream LED - Lights when the input audio signal is Dolby Digital, DTS audio format and 2-ch Dolby.

LPCM LED — Lights when the input audio signal is LPCM-2Ch.

HDMI LED - Lights when the input audio format is multi-channel, LPCM-2Ch, or Hi-Def audio.

S/PDIF LED - Lights when the input audio format is multi-channel (except HBR) or LPCM-2Ch.

Analog LED — Lights when the input audio format is LPCM-2Ch.



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XTP R HDM

XTP T HDMI